NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE HYDROLOGIC SERVICE AREA:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL WEATHER SERVICE SAN JOAQUIN VALLEY - HANFORD , CA

REPORT FOR:

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

MONTH: FEBRUARY YEAR: 2013

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE:

National Weather Service/Office of Hydrology

1325 East-West Highway #7116 Kevin Durfee
Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: March 1, 2013

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts and hydrologic products issued (WSOM E-41).

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 \mid X \mid An ${\bf X}$ inside this box indicates that no flooding occurred for the month +---+ within this hydrologic service area.

February, 2013 was much drier than normal which further exacerbated the already substantial seasonal precipitation deficit throughout the HSA. Most cold fronts that trekked southward through the district during the month were moisture starved. This included a cold frontal passage on the night of the 5th and the afternoon of the 23rd.

There were only two storm systems that brought significant precipitation to the HSA. Both storms originated in the Gulf of Alaska. The first one barreled southward through the district on the 7th and 8th and dumped nearly a foot of snow on the southern Sierra. Cold air accompanying this storm brought snow levels down to about 2500 feet where up to a few inches of the white stuff accumulated during the morning of the 8th. I-5 through the Grapevine became snow-covered and forced CHP to shut it down on the night of the 8th into the morning hours of the 9th. Meanwhile, the storm brought up to three quarters of an inch of rain to the San Joaquin Valley and lower foothills. Small hail accompanied the heaviest showers in these areas during the afternoon of the 8th. The second storm system moved across the HSA on the 19th with similar precipitation amounts. By the time this storm exited into the Four Corners region on the 20th, it left a dusting of snow to elevations as low as 1500 feet and snarled traffic in the foothills and through the mountain passes of Kern county with up to 4 inches of snow. Highway 58 through Tehachapi Pass and I-5 through the Grapevine shut down for several hours because of snow and ice. While up to 7 inches of snow fell in the southern Sierra, the heaviest snow accumulations from this storm occurred in the Kern county mountains. Bear Valley Springs was buried by nearly 20 inches of snow from this storm where gusty winds whipped the snow into 4-foot drifts!

Temperature-wise, the month averaged slightly cooler than normal. Invasions of Arctic air behind the storm systems referenced above produced frosty overnight temperatures in the San Joaquin Valley. During the predawn hours from the 10th through the 15th and again on the 21st and 22nd, temperatures dipped into the upper 20s in the coldest locations of the San Joaquin Valley. February, 2013 had plenty of mild days, too, particularly during the middle and end of the month as a ridge of high pressure aloft dominated the pattern. Afternoon temperatures during these periods climbed into the 70s in the San Joaquin Valley and lower foothills.

A slow depletion of the snowpack continued over the southern Sierra Nevada, which fell to 67 percent of normal by March 1st. On a positive note, the melting snowpack brought water levels up to about 78 percent of capacity at most of the major reservoirs by the end of the month.

cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO